Timothy Loeb Rockefeller Institute for Medical Research New York, New York

August 22, 1958

Dr. Joshua Lederberg Department of Genetics University of Wisconsin Madison, Wisconsin

Dear Dr. Lederberg:

To avoid duplication in an area which is under active investigation by your group, the following letter is sent to you (on the advisement of Dr. Maurice Fox) explaining the lines along which I may eventually be able to develop my doctorate thesis. In continuance of the excellent work which you have published, various protoplasting techniques will be used in an attempt to determine if any differences can be distinguished in the cell wall of E. coli K-12 as a function of the bacterium's mating type ('F' and F'). If sexual differentiation can be perceived at the cell wall, this distinction will be further investigated by the use of such surface phenomena as phage adsorption, and by immunological and chemical procedures. If sexual differentiation appears to be solely a property of the cytoplasmic membrane (as your data tends to indicate), attention will then be turned to the kinetics of F transfer using radioactive sulfer as a cytoplasmic tracer.

Twould be most grateful for any advice you could give, and specifically I have the following questions and requests:

1) Have you as yet investigated the temperature coefficient of F transfer?

2) I understand that one of your students has completed a thesis on a study of F transfer. Is it possible

LOEB,

to obtain a microfilm or other copy of this thesis? 3) I have acquired the following coli strains from the Cold Spring Harbor collection: 58-161 and WI 177; CS67 and W I; CS100 and CS101. Do you have any strains which you feel would be more suitable for the project outlined above and if so is it possible to procure them from you?

I thank you for your kind attention and hope to meet you again whenever you have occasion to be at The Institute.

Juno the fort

Yours truly;